

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ODD STEIJER, CHRISTER MOLL, BENGT LINDSTROM,
CHRISTIAN VIEIDER, PAUL ERIKSEN, JAN-AKE ENGSTRAND,
OLLE LARSSON and HAKAN ELDERSTIG

Appeal No. 2000-0887
Application No. 08/848,238

HEARD: December 12, 2001

Before BARRETT, GROSS, and LEVY, Administrative Patent Judges.
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-17 and 20-31¹. Claims 18 and 19 have been indicated to be allowable if written in independent form.

¹ The rejection of claims 2 and 28 under 35 U.S.C. § 112, second paragraph, has been withdrawn by the examiner in view of the amendment (Paper No. 15, filed May 6, 1999) filed subsequent to the final rejection (answer, page 2).

BACKGROUND

Appellants' invention relates to an angled opto-mechanical connector. An understanding of the invention can be derived from a reading of exemplary claims 9 and 21, which are reproduced as follows:

9. Method of producing an angled opto-mechanical connector, comprising

manufacturing a fixture with straight and parallel grooves running on an upper side of the fixture from a first fixture side to a second fixture side, at least some of the grooves for receiving optical fibres and others of the grooves for receiving guide pins;

fastening a lid above the fixture;

introducing fiber ends in the grooves intended for the fibres;

introducing guide pins in the grooves intended for the guide pins,

positioning the fixture, lid, fibre ends and guide pins in a mould cavity in such a way that the fibres are bent away from a plane having said grooves for receiving said optical fibres; and

at least partially surrounding the fixture, lid, fibre ends, and guide pins with a capsule.

21. An angled opto-mechanical connector, comprising:

a plurality of optical fibers, each of said optical fibers having a first end portion and a second end portion;

a fixture having a plurality of grooves that each receive at least a portion of said first end portion of one of said optical fibers, at least some of said grooves being substantially located in a plane;

a lid covering at least a portion of said fixture, said portions of said optical fibers that are received by said grooves being located between said fixture and said lid,

each of said optical fibers having an intermediate portion that is located between said first portion and said second portion, said intermediate portions of said optical fibers being bent away from said plane; and

a capsule that at least partially surrounds said intermediate portions of said optical fibers, said lid, and said fixture.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Shaheen et al. (Shaheen)	4,496,215	Jan. 29, 1985
Yamada et al. (Yamada)	5,631,985	May 20, 1997
(filed Sep. 29, 1995)		
Sakurai et al. (Sakurai) ²	S56-30112	Mar. 26, 1981
Japanese Patent Application		

Claims 1-17 and 20-30 stand rejected under 35 U.S.C.

² In determining the teachings of Sakurai, we will rely on the translation provided by the USPTO. A copy of the translation is attached for the appellants' convenience.

§ 103(a) as being unpatentable over Shaheen in view of Yamada.

Claim 31 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Shaheen in view of Yamada and further in view of Sakurai.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellants regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 21, mailed November 23, 1999) for the examiner's complete reasoning in support of the rejections, and to appellants' brief (Paper No. 20, filed October 5, 1999) and reply brief (Paper No. 22, filed January 24, 2000) for appellants' arguments thereagainst. Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the briefs have not been considered. See 37 CFR 1.192(a).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejections advanced by the examiner, and the evidence of obviousness relied upon by the examiner as support for the

rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the invention as set forth in claims 1-17 and 20-31. Accordingly, we reverse, essentially for the reasons set forth by appellants.

We begin with the rejection of claims 1-17 and 20-30 under 35 U.S.C. § 103(a) as unpatentable over Shaheen in view of Yamada. The examiner's position (answer, pages 4 and 5) is that Shaheen discloses optical fibers 18 which stick out of the fixture and bend in a direction away from the plane, but does not disclose a fixture with first and second sets of grooves, wherein the first set of grooves is smaller than the second set of grooves and lying substantially in one plane. To overcome this deficiency in Shaheen, the examiner turns to Yamada for a teaching of a fixture having straight and

parallel grooves of two sizes, and a lid fastened above the fixture. With regard to independent claim 2, the examiner asserts (answer, page 4) that the combined teachings of Shaheen and Yamada do not show two fixtures having grooves, but maintains that it would have been obvious to include an additional fixture for coupling to another optical connector. With regard to independent claim 9, the examiner takes the position (answer, pages 5 and 6) that Shaheen and Yamada "do not specifically disclose the specific method of producing an angled opto-mechanical connector. However, it is clear that applicant's methods are obvious to the ordinary skilled person in the art at the time the invention was made."

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references

to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

Appellants do not argue the combinability of Shaheen and Yamada, but assert (brief, page 7) that Shaheen does not disclose optical fibers bent outside of the plane, and that Yamada does not overcome this deficiency of Shaheen.

The examiner acknowledges (answer, page 8) that "Shaheen does not show the Applicant's angled feature," but asserts that Shaheen's teaching of having an optical cable in a curved shape suggests a bend in a plane or a bend outside of a plane. From our review of Shaheen and Yamada, we agree with appellants that Shaheen and Yamada do not suggest optical fibers bent outside the plane formed by grooves in the fixture.

Shaheen discloses (col. 1, lines 7-10) that the principal advantage of the invention is the flat configuration of the fiber optic cable and its ability to make flat turns. An object of Shaheen's invention (col. 1, lines 41-45) is to provide a thin, flat, flexible, multifiliment, fiber optic cable capable of being manufactured with curved as well as straight and bifurcated segments. Shaheen further discloses (col. 2, lines 64-66) that the fiber optic filaments have exposed ends and are co-planar with the flat plane of the

cable end. We find no teaching or suggestion in Shaheen for the fiber optic cable to be anything other than a flat cable. We do not agree with the examiner that the disclosure in Shaheen of having a curved segment provides a teaching or suggestion of making the bent or curved segment outside of the plane defined by grooves of the fixture. To the contrary, we find that Shaheen suggests that the fiber optic cable have a flat co-planar structure that does not bend outside of a flat plane. While we agree with the examiner that Yamada teaches a fiber optic cable connector having different size grooves, we find that Yamada does not make up for the deficiencies of Shaheen.

"Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor."

Para-Ordnance Mfg. v. SGS Importers Int'l, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995)(citing W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13 (Fed. Cir. 1983)). The examiner's broad, conclusory opinion of obviousness does not meet the requirement for actual evidence. Each of the independent claims requires bending of the optical fibers outside the

plane formed by grooves in the fixture. Because Shaheen does not address bending the fiber optic cable outside of the plane formed by grooves of the fixture, we are not persuaded that teachings from the applied prior art would appear to have suggested the claimed limitations. From all of the above, we find that the examiner has failed to establish a prima facie case of obviousness. Accordingly, the rejection of claims 1-17 and 20-30 under 35 U.S.C. § 103(a) is reversed.

We turn next to the rejection of dependent claim 31 under 35 U.S.C. § 103(a) as above, further in view of Sakurai. As Sakurai does overcome the deficiencies of the basic combination of Shaheen and Yamada, the rejection of claim 31 under 35 U.S.C. § 103(a) is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject
claims 1-17 and 20-31 under 35 U.S.C. § 103(a) is reversed.

REVERSED

LEE E. BARRETT)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
ANITA PELLMAN GROSS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
STUART S. LEVY)	
Administrative Patent Judge)	

Appeal No. 2000-0887
Application No. 08/848,238

Page 12

SSL/gjh

Appeal No. 2000-0887
Application No. 08/848,238

Page 13

RONALD L. GRUDZIECKI
BURNS, DOAN, SWECKER & MATHIS
P.O. BOX 1404
ALEXANDRIA, VA 22313-1404

APPEAL NO. 2000-0887 - JUDGE LEVY
APPLICATION NO. 08/848,238

APJ LEVY

APJ GROSS

APJ BARRETT

DECISION: **REVERSED**

Prepared By:

DRAFT TYPED: 22 Jul 02

FINAL TYPED: